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Appellant: Joseph Seamon

Examiner: Hanh B. Thai

Serial No.: 09/733,767

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Filed: December 08, 2000

Docket: 2043.098US1

Title: METHOD AND SYSTEM FOR CATEGORIZING ITEMS IN BOTH ACTUAL

AND VIRTUAL CATEGORIES

## **APPEAL BRIEF UNDER 37 CFR § 41.37**

Mail Stop Appeal Brief- Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

The Appeal Brief is presented in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed on January 18, 2007 and further in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on December 11, 2006, from the Final Rejection of claims 1, 3-6, 8-12, 14-18 and 20-29 of the above-identified application, as set forth in the Final Office Action mailed on August 31, 2006.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of \$500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.20(b)(2). Appellant respectfully requests consideration and reversal of the Examiner's rejections of pending claims.

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## 1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, EBAY INC., as evidence by the assignment recorded December 8, 2000 at Reel 011358, Frame 0581.

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# 2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present appeal.

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## 3. STATUS OF THE CLAIMS

The present application was filed on December 8, 2000 with claims 1-29. Claims 2, 7, 13, and 19 were canceled during prosecution. A non-final Office Action mailed March 8, 2006. A Final Office Action (hereinafter "the Final Office Action") was mailed August 31, 2006. Claims 1, 3-6, 8-12, 14-18 and 20-29 stand twice rejected, remain pending, and are the subject of the present Appeal.

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#### 4. STATUS OF AMENDMENTS

Appellant has submitted amendments to the claims 14, 20, 28, and 29 pursuant to 37 CFR 41.33, subsequent to the Final Office Action mailed August 31, 2006, after the filing of the notice of appeal, and prior to the date of filing of the present appeal brief. The purpose of the amendments was to present the claims 14 and 28 in better form for consideration on appeal and to correct the claims 20 and 29 to recite the disclosed invention.

In response to the above amendments, an Advisory Action was mailed on March 7, 2007 indicating the proposed amendments had not been entered for the reason that the claim amendments do not place the application in condition for allowance. Accordingly, the claims presented in the present appeal brief do not include the requested amendments.

Pursuant to the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility IV (B), last paragraph, (22 November 2005), Appellant requests the Examiner to identify features of the present invention set forth in the written description that would render the claimed subject matter statutory if recited in the claim.

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#### 5. SUMMARY OF CLAIMED SUBJECT MATTER

#### CLAIM 1

Some aspects of the present inventive subject matter include, but are not limited to, a method of constructing category structures within a database (e.g., Figure 7, callout 110, paragraph 48), the method including: defining a first structure of categories to classify a data item, the first structure including at least a first category (e.g., Figure 7, callout 112, paragraph 49; Figure 4, paragraphs 35-38; Figure 5, paragraphs 39-46; Figure 6, paragraph 47); defining a second structure of categories to provide an alternative classification of the data item, the second structure including at least a second category (e.g., Figure 7, callout 114, paragraph 50; Figure 4, paragraphs 35-38; Figure 5, paragraphs 39-46; Figure 6, paragraph 47); and defining the first structure of categories as a first hierarchy of categories in the database (e.g., Figure 7, callout 112, Paragraph 49; Figure 7, callout 112, paragraph 49; Figure 4, paragraphs 35-38; Figure 5, Paragraphs 39-46; Figure 6, paragraph 47) and defining the second structure of categories as an alternative second hierarchy of categories in the database (e.g., Figure 7, callout 114, paragraph 50; Figure 4, paragraphs 35-38; Figure 5, paragraphs 39-46; Figure 6, paragraph 47), wherein the second category is associated with the first category (e.g., Figure 7, callout 116, paragraph 50, 51), the first category comprises a first category path defined in terms of the first structure of categories (e.g., Figure 5, callout 90, paragraph 40) and the second category comprises a second category path defined in terms of the second structure of categories (e.g., Figure 5, callout 92, paragraph 41), the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers (e.g., Figure 5, callout 90, paragraph 40), the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers (e.g., Figure 5, callout 92, paragraph 41) and the data item is user-classifiable under the first structure of categories (e.g., Figures 10B-10E, paragraphs 20, 45, 64-67) and is not user-classifiable under the second structure of categories (e.g., paragraphs 45, 50, original claim 7).

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## CLAIM 14

Some aspects of the present inventive subject matter include, but are not limited to, a method of classifying a data item within a database, the method including: identifying a first category, of a first hierarchy of categories, attributed to a data item (e.g., Figures 8, callout 132, paragraph 59); and automatically attributing a second category, of a second alternative hierarchy of categories, to the data item (e.g., Figure 8, callouts 132, 134, paragraphs 59-62) wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories in the database (e.g., Figure 5, callouts 90, 92, paragraphs 40, 41), the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers (e.g., Figure 5, callout 90, paragraph 40), the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers (e.g., Figure 5, callout 92, paragraph 41) and the data item is user-classifiable under the first structure of categories (e.g., Figures 10B-10E, paragraphs 20, 45, 64-67) and is not user-classifiable under the second structure of categories (e.g., paragraphs 45, 50, original claim 7).

#### CLAIM 20

Some aspects of the present inventive subject matter include, but are not limited to, a method of facilitating location of a data item within a database (e.g., Figure 8, callout 120, paragraphs 15, 52-63) the method including: facilitating user-navigation of a first category structure to select a first category (e.g., Figure 8, callouts 122-128, paragraphs 53-56); identifying a second category of a second category structure as being linked to the first category of the first category structure (e.g., Figure 8, callout 132, paragraphs 59-60), the first and second category structures comprising respective first and second hierarchies of categories in the database (e.g., Figure 5, callouts 92, 90, paragraphs 41, 40); and identifying data items of the second category responsive to the selection of the first category of the first category structure (e.g., Figure 8, callout 134, paragraphs 60-63), wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories (e.g., Figure 5, callouts 92, 90, paragraphs 41, 40), the first category path including a first plurality of

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categories that are respectively associated with a first plurality of category identifiers (e.g., Figure 5, callout 92, paragraph 41) and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers (e.g., Figure 5, callout 90, paragraph 40), wherein the first category structure includes a first hierarchy of categories (e.g., Figure 5, callouts 92, paragraphs 41), the second category structure includes a second alternative hierarchy of categories (e.g., Figure 5, callouts 90, paragraphs 40), and the data item is user classifiable under the first structure of categories and is not user-classifiable under the second structure of categories.

#### CLAIM 28

Some aspects of the present inventive subject matter include, but are not limited to, a tangible machine-readable medium (e.g., Figure 11, callout 324, paragraph 71) storing a sequence of instructions (e.g., Figure 11, callout 326, paragraph 71) that, when executed by a machine (e.g., Figure 11, callout 300, paragraph 69), cause the machine to: identify a first category, of a first hierarchy of categories, attributed to a data item (e.g., Figure 8, callout 132, paragraph 59); and automatically attribute a second category, of a second alternative hierarchy of categories, to the data item, (e.g., Figure 8, callout 132, 134, paragraph 59-62) wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories (e.g., Figure 5, callouts 90, 92, paragraphs 40, 41), the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers (e.g., Figure 5, callout 90, paragraph 40) and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers (e.g., Figure 5, callout 92, paragraph 41), and the data item is user-classifiable under the first structure of categories (e.g., Figures 10B-10E, paragraphs 20, 45, 64-67) and is not user-classifiable under the second structure of categories (e.g., Paragraphs 45, 50, original claim 7).

#### CLAIM 29

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Some aspects of the present inventive subject matter include, but are not limited to, a tangible machine-readable medium (e.g., Figure 11, callout 324, paragraph 71) storing a sequence of instructions (e.g., Figure 11, callout 326, paragraph 71) that, when executed by a machine (e.g., Figure 11, callout 300, paragraph 69), cause the machine to: facilitate usernavigation of a first category structure to select a first category (e.g., Figure 8, callouts 122-128, paragraphs 53-56); identify a second category of a second category structure as being linked to the first category of the first category structure (e.g., Figure 8, callouts 132, paragraphs 59-60), the first and second category structures comprising respective first and second hierarchies of categories (e.g., Figure 5, callouts 92, 90, paragraphs 41, 40); and identify data items of the second category responsive to the selection of the first category of the first category structure (e.g., Figure 8, callout 134, paragraphs 60-63), wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories (e.g., Figure 5, callouts 92, 90, paragraphs 41, 40), the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers (e.g., Figure 5, callouts 92, paragraphs 41) and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers (e.g., Figure 5, callouts 90, paragraphs 40), wherein the first category structure includes a first hierarchy of categories (e.g., Figure 5, callouts 92, paragraphs 41), the second category structure includes a second alternative hierarchy of categories (e.g., Figure 5, callouts 90, paragraphs 40), and the data item is user classifiable under the first structure of categories and is not userclassifiable under the second structure of categories.

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended claims and its legal equivalents for a complete statement of the invention.

## 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

## §101 Rejection of the Claims

Claims 1, 3-6, 8-12, 14-18 and 20-29 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

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## 7. ARGUMENT

# A) The Applicable Law under 35 U.S.C. §101

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result.

AT&T v. Excel Communications, Inc., 172 F.3d

"While a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."

Diehr, 450 U.S. 175, 187 (1981) citing Mackay Radio & Telegraph Co. v. Radio of America, 306 U.S. 86, 94, 59 S.Ct. 427, 431, 83 L.Ed. 506 (1939).

Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again.

<u>Id.</u> citing In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a Sec. 101 judicial exception, in that the process claim must set forth a practical application of that Sec. 101 judicial exception to produce a real-world result (emphasis added).

<u>Id</u>. citing Benson, 409 U.S. at 71-72, 175 USPQ at 676-77.

...a claimed computer computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permits the computer programs functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

MPEP 2106.01 I.

B) The rejection of claims 1, 3-6, 8-12, 14-18 and 20-29 was erroneous because the claimed inventions of independent claims 1, 14, 20, 28 and 29 achieve a final result that is concrete, tangible and useful.

Appellant respectfully submits that claims 1, 3-6, 8-12, 14-18 and 20-29 should not be rejected under 35 U.S.C. § 101 for the reason that the claimed inventions of independent claims 1, 14, 20, 28 and 29 achieve a final result that is concrete, tangible and useful.

#### CLAIM 1

Claim 1 recites a final result that is useful, tangible, and concrete. Claim 1, for example, recites "a method of constructing category structures within a database" that includes "defining a first structure of categories to classify a data item, the first structure including at least a first category;" "defining a second structure of categories to provide an alternative classification of the data item, the second structure including at least a second category;" "defining the first structure of categories as a first hierarchy of categories in the database and defining the second structure of categories as an alternative second hierarchy of categories in the database, wherein the second category is associated with the first category...and the data item is user-classifiable under the first structure of categories and is not user-classifiable under the second structure of categories."

Claim 1, therefore, results in constructing category structures in a database, the first category structure to classify a data item and the second category structure to provide an alternative second classification of the data item, the data item is user classifiable under the first hierarchy of categories in the database but not user-classifiable under a second hierarchy of categories in the database. Indeed, the construction of such category structures is useful because such construction enables a classification of the data item and an alternative classification of the same data item. Further, such a construction may not be said to be "an abstract idea of defining" (Final Office Action, mailed 8.31.2006, page two) because the category structures are "constructed within a database," as recited by claim 1. In other words, the category structures do

not come into existence in the databases of their own accord – they must be defined. For example, a person having ordinary skill in the art may use an SQL "define" statement to construct the category structures in the database. Indeed, the specification describes one embodiment of the invention that may issue a series of SQL statements against a database (Application, page 21). Accordingly, the "defining" required by claim 1 cannot be said to merely be an abstract idea in a persons mind, as maintained by the Final Office Action (Paragraph 3, Page 3), because the "defining" in claim 1 results in the construction of two category structures in a database, the existence of the category structures being independent of the consciousness of a particular person, objectively knowable, and required for subsequent storage and retrieval of data items both to and from the category structures in the database.

Moreover, Appellant respectfully points out that as of November 22, 2005 the Mental Step Test is not to be applied by examiners in determining whether the claimed invention is patent eligible subject matter (USPTO OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject matter Eligibility, Annex 3, Improper Tests for Subject Matter Eligibility"). Accordingly, the Final Office Action's allegation that subject matter of claim 1 is not eligible subject matter for the reason that the "defining" of claim 1 "may simply be defining in [a] person's mind" (Final Office Action, Paragraph 3, Page 3) is improper. Appellant respectfully requests the Examiner to reconsider the present rejection without reliance on the Mental Step Test.

The result achieved by claim 1 may also said to be practical because the definition of category structures in the database is prerequisite to using the category structures to classify and/or identify data items. Merely for example, the present application describes an embodiment in which the "database" of claim 1 may be used:

The database may, in one exemplary embodiment, support a web site that classifies data items for presentation to a user via a browser.

Application, Paragraph 48.

Certainly the construction of category structures in a database that supports a web site that classifies data items for presentation to a user via browser must be said to be practical. Finally, the "defining," as recited in claim 1, may be repeated and therefore must be said to be concrete.

## CLAIM 14

Claim 14, recites "a method of classifying a data item within a database." The method of claim 14 requires identifying a first category, of a first hierarchy of categories in the database, attributed to a data item and automatically attributing a second category, of a second alternative hierarchy of categories in the database, to the data item.

The result of claim 14 is useful because the data item is automatically attributed a second category under a second hierarchy of categories in the database. Indeed, in one example embodiment, the result of claim 14 may be useful because a buyer is more likely to locate the data item that is classified under the identified first category and the attributed second category. Consider the following example:

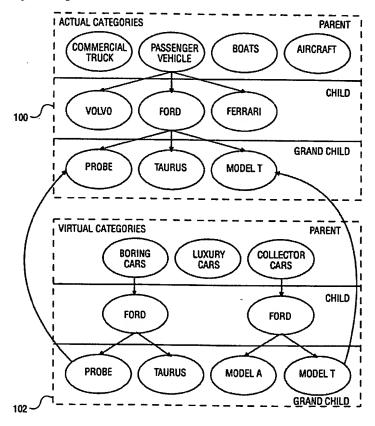


FIG. 6

Merely for example, assume a first category, "Model T," that has been identified as attributed to a data item for a Model T car located under a first hierarchy of categories in the form of

"ACTUAL CATEGORIES," as illustrated in Figure 6. Also, assume a second category, "Model T," under a second hierarchy of categories of "VIRTUAL CATEGORIES," as illustrated in Figure 6, is automatically attributed to the same data item. This result may be considered useful because, in one embodiment, a data item, classified as such, enables a buyer to browse the first hierarchy of categories or the second hierarchy of categories to locate the data item for the "Model T." To be sure, the result is useful to at least a buyer and seller who would not have transacted a data item but for the seller's location of the data item classified under the automatically attributed category, according to one embodiment. For the same reasons that the result of claim 14 is useful, it may also be said to be practical. Finally, the result of claim 14 may be repeated and therefore must be said to be concrete.

#### CLAIM 28

Claim 28 recites a tangible machine-readable medium storing a sequence of instructions that, when executed by a machine, cause the machine to identify a first category, and automatically attribute a second category to a data item, as described above for claim 14. Accordingly, the remarks for claim 14 should also be considered for claim 18. Further, a "tangible machine-readable medium" storing a "sequence of instructions" is a computer element which defines a structural and functional interrelationship between the "instructions" and the rest of the machine because the "instructions" stored on the tangible machine-readable medium cause the machine to "identify," and "automatically attribute." Accordingly, the "tangible machinereadable medium" recited in the claim 28 permits the "instructions" functionality to be realized in the "machine" making the claim 28 statutory.

#### CLAIM 20

Claim 20, recites "a method of facilitating location of a data item within a database." The method requires identifying a second category of a second category structure as being linked to the first category of the first category structure, the first and second category structures comprising respective first and second hierarchies of categories in the database; and identifying data items of the second category responsive to the selection of the first category of the first category structure.

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The result of claim 20 is useful because the data items of the second category in the database may be identified in the first category responsive to the selection of the first category. As mentioned above, the result is useful, in one embodiment, to at least a buyer and seller who would not have transacted a data item but for the seller's identification of the data item under the first category responsive to a selection of the first category and via the link from the first category to the second category. For the same reasons that the result of claim 20 is useful it may also be said to be practical. Finally, the result of claim 20 may be repeated and therefore must be said to be concrete.

#### CLAIM 29

Claim 29 recites a tangible machine-readable medium storing a sequence of instructions that, when executed by a machine, cause the machine to identify a second category of a second category structure as being linked to the first category of the first category structure, the first and second category structures comprising respective first and second hierarchies of categories in the database; and identify data items of the second category responsive to the selection of the first category of the first category structure. Accordingly, the remarks for claim 20 should also be considered for claim 29. Further, a "tangible machine-readable medium" storing a "sequence of instructions" is a computer element which defines a structural and functional interrelationship between the "instructions" and the rest of the machine because the "instructions" stored on the tangible machine-readable medium cause the machine to "facilitate user navigation," "identify a second category," and "identify data items." Accordingly, the "tangible machine-readable medium" recited in the claim 29 permits the "instructions" functionality to be realized in the "machine" making the claim 29 statutory.

Claims 3-6 and 8-12, depend on independent claim 1. Claims 15-18 depend on independent claim 14 and claims 21-27 depend on independent claim 20. If an independent claim is patentable subject matter under 35 U.S.C. § 101 then, any claim depending there from also includes patentable subject matter and rejection of claims 3-6, 8-12, 15-18 and 21-27 under 35 U.S.C. § 101 is also addressed by the above remarks.

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#### 8. SUMMARY

Date

Appellant respectfully submits that claims 1, 3-6, 8-12, 14-18 and 20-29 should not be rejected under 35 U.S.C. § 101 for the reason that the claimed inventions of independent claims 1, 14, 20, 28 and 29 achieves a final result that is concrete, tangible and useful. Accordingly, the Examiner has not met his initial burden for establishing a prima facie case of unpatentability. For at least the foregoing reasons, the rejection of claims 1, 3-6, 8-12, 14-18 and 20-29 under 35 U.S.C. § 101 is without basis and should be withdrawn.

> Respectfully submitted, JOSEPH SEAMON By his Representatives, SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938

> > Reg. No. 53,719

Minneapolis, MN 55402

03/19/2007 By Mark R. Vatuone

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 19/2 day of March 2007.

Dawn R. Shaw	/Dawn R. Shaw/
Name	Signature

## **CLAIMS APPENDIX**

- 1. A method of constructing category structures within a database, the method including: defining a first structure of categories to classify a data item, the first structure including at least a first category;
  - defining a second structure of categories to provide an alternative classification of the data item, the second structure including at least a second category; and
  - defining the first structure of categories as a first hierarchy of categories in the database and defining the second structure of categories as an alternative second hierarchy of categories in the database,
  - wherein the second category is associated with the first category, the first category comprises a first category path defined in terms of the first structure of categories and the second category comprises a second category path defined in terms of the second structure of categories, the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers, the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers and the data item is user-classifiable under the first structure of categories and is not userclassifiable under the second structure of categories.
- 3. The method of claim 1 wherein the first category is a leaf category of the first hierarchy of categories.
- 4. The method of claim 1 wherein the second category is a leaf category of the second hierarchy of categories
- 5. The method of claim 1 including defining the second category to point to the first category.

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6. The method of claim 1 wherein the defining of the second structure includes defining the second hierarchy such that navigation of the second hierarchy to locate data items classified as being attributed to the second category locates data items classified as being attributed to the first category of the first hierarchy.

- 8. The method of claim 1 wherein the data item is directly categorized as being within the first category of the first structure of categories and is indirectly categorized as being within the second category of the second structure of categories.
- 9. The method of claim 1 wherein the definition of the first and second structures of categories includes defining a category table including a category record for each category of the first and second structures of categories, each category record within the category table including a category identifier, wherein a category record that describes the second category includes a category identifier of a category record for the first category.
- 10. The method of claim 1 wherein the data item is a database record describing any one of a group of products and services of a transaction facilitated by a network-based transaction facility.
- 11. The method of claim 1 wherein the network-based transaction facility is a network-based auction facility.
- The method of claim 1 including defining a third structure of categories to provide a 12. further alternative classification of the data item, the third structure including at least a third category, wherein the third category is associated with the first category of the first structure of categories.
- A method of classifying a data item within a database, the method including: 14. identifying a first category, of a first hierarchy of categories, attributed to a data item; and automatically attributing a second category, of a second alternative hierarchy of categories, to the data item,

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wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories in the database, the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers, the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers and the data item is user-classifiable under the first hierarchy of categories and is not user-classifiable under the second alternative hierarchy of categories.

- 15. The method of claim 14 wherein the first and second categories are associated within a description of categories within the database.
- The method of claim 14 wherein the first category is attributed to the data item by a user 16. during a user classification operation and the second category is dynamically attributed to the data item during a user navigation operation of the second hierarchy of categories, wherein the dynamic attributing of the second category is performed by identification of an association between the first and second categories.
- 17. The method of claim 14 wherein the first category is directly recorded within the database as being attributed to the data item and the second category is recorded as being linked to the first category within the database.
- 18. The method of claim 14, wherein the first and second categories are each leaf categories of the respective first and second hierarchies of categories.
- 20. A method of facilitating location of a data item within a database, the method including: facilitating user-navigation of a first category structure to select a first category; identifying a second category of a second category structure as being linked to the first category of the first category structure, the first and second category structures

comprising respective first and second hierarchies of categories in the database; and

identifying data items of the second category responsive to the selection of the first category of the first category structure,

wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories, the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers, the data item is not user classifiable under the first category structure and is user-classifiable under the second category structure.

- 21. The method of claim 20 wherein the facilitating of the user navigation comprises presenting at least one user interface to display navigation information according to the first hierarchy of categories.
- 22. The method of claim 21 wherein the presenting of the at least one user interface comprises generating at least one markup language document.
- 23. The method of claim 22 including providing, within the context of the markup language document, any one of a group of navigation aids including a drop-down menu, a selection of check boxes, a selection of radio buttons, an embedded Java application and an embedded ActiveX control.
- 24. The method of claim 20 wherein the identification of the second category comprises accessing a category table including a first record describing the first category, wherein the first record includes a pointer to a second record within the category table describing the second category.
- 25. The method of claim 20 wherein the identifying of the data items comprises accessing an

items table to identify at least a first record identifying the second category.

26. The method of claim 20 wherein the first and second categories comprise respective leaf categories of the first and second hierarchies of categories.

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- 27. The method of claim 20 including communicating the identified data items within a markup language document transmitted over a network.
- 28. A tangible machine-readable medium storing a sequence of instructions that, when executed by a machine, cause the machine to:

identify a first category, of a first hierarchy of categories, attributed to a data item; and automatically attribute a second category, of a second alternative hierarchy of categories, to the data item,

wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories, the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers, and the data item is user-classifiable under the first hierarchy of categories and is not user-classifiable under the second alternative hierarchy of categories.

29. A tangible machine-readable medium storing a sequence of instructions that, when executed by a machine, cause the machine to:

facilitate user-navigation of a first category structure to select a first category; identify a second category of a second category structure as being linked to the first category of the first category structure, the first and second category structures comprising respective first and second hierarchies of categories; and identify data items of the second category responsive to the selection of the first category of the first category structure,

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wherein the first and second categories are defined by respective category paths of the first and second hierarchies of categories, the first category path including a first plurality of categories that are respectively associated with a first plurality of category identifiers and the second category path including a second plurality of categories that are respectively associated with a second plurality of category identifiers, the data item is not user-classifiable under the first category structure and not user-classifiable under the second category structure.

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# **EVIDENCE APPENDIX**

None.

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# **RELATED PROCEEDINGS APPENDIX**

None.